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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,623	05/08/2006	Yasuyuki Sanai	Q94379	1501
23373 7590 07/29/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
TREIDL, JESSICA I				
ART UNIT		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/578,623

**Applicant(s)**

SANAI, YASUYUKI

**Examiner**

JESSICA TREIDL

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 5-24 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 05/08/2006  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

The abstract of the disclosure is objected to because it appears to contain a typo. The phrase, “an active energy beam-curable composition for optical material is provide that comprises . . .” is grammatically incorrect. Suggested correction is “an active energy beam-curable composition for optical material is provided that comprises . . .” Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushima et al (US 5,969,867).

Regarding claims 5-13, Fukushima et al teach an active ray-curable composition (Abstract) comprising an active energy ray-sensitive radical polymerization initiator (5:4-5) {photoinitiator}, bis(4-acryloylethoxyphenyl) sulfide (Structure II 5:55-6:15, wherein Z=-S-, p & q=0, R<sup>3</sup>= -(OCH<sub>2</sub>CH<sub>2</sub>)-, n&m=1, and R<sup>2</sup>=H), and 2-phenylphenyl(meth)acrylate (8:2) {o-phenylphenyl acrylate}. Regarding the weight percent limitations of instant components (A) and

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(B), Fukushima et al teach the composition comprising 10-90 parts by weight of instant structure (1) (7:3-5, wherein instant structure (1) is equivalent to reference component (B-1)) and 1-50 parts by weight of instant structure (2) (8:15-17, wherein instant structure (1) is equivalent to reference component (B-2)). Furthermore, the reference teaches the composition specifically containing 19.6 wt % and 34.3 wt % of instant structure (1) and instant structure (2), respectively, per examiner's calculations (Table 2 Ex. 11, reference component (B-1) is equivalent to instant structure (1) & reference component (B-2) is equivalent to instant structure (2)).

Regarding claim 14, Fukushima et al teach the cured composition having a refractive index of 1.62 or higher (9:39), however the reference is silent to the temperature at which the refractive index is measured. Additionally, the reference teaches the refractive index of equivalent compositions being higher than 1.62 at 20°C (Table 2 Ex. 8, 9, 11, 12 & 13, 10:64). The Office realizes that all the claimed effects or physical properties are not positively stated by the reference. However, the reference teaches all of the claimed reagents. Therefore, the claimed effects and physical properties, i.e. a refractive index of 1.59 or higher at 25 °C, would inherently be achieved by a composition with all the claimed ingredients. If it is the applicants' position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects with only the claimed ingredients.

Regarding claim 15, Fukushima et al teach the active energy ray-curable composition as a lens sheet (Abstract).

Claims 16-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushima et al (US 5,969,867).

Regarding claims 16-24, Fukushima et al teach a method for producing a lens sheet comprising casting an active energy ray-curable composition into a lens mold and irradiating for curing (9:7-16). Furthermore, Fukushima et al teach an active ray-curable composition (Abstract) comprising an active energy ray-sensitive radical polymerization initiator (5:4-5) {photoinitiator}, bis(4-acryloylethoxyphenyl) sulfide (Structure II 5:55-6:15, wherein Z=-S-, p & q=0, R<sup>3</sup>=-(OCH<sub>2</sub>CH<sub>2</sub>)-, n & m=1, and R<sup>2</sup>=H), and 2-phenylphenyl(meth)acrylate (8:2) {o-phenylphenyl acrylate}. Regarding the weight percent limitations of instant components (A) and (B), Fukushima et al teach the composition comprising 1-90 parts by weight of instant structure (1) (7:3-5, wherein instant structure (1) is equivalent to reference component (B-1)) and 1-50 parts by weight of instant structure (2) (8:15-17, wherein instant structure (1) is equivalent to reference component (B-2)). Furthermore, the reference teaches the composition specifically containing 19.6 wt % and 34.3 wt % of instant structure (1) and instant structure (2), respectively, per examiner's calculations (Table 2 Ex. 11, reference component (B-1) is equivalent to instant structure (1) & reference component (B-2) is equivalent to instant structure (2)).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection

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is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 5-24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7-26 of copending Application No. 10/589660 in view of Fukushima et al (US 5,969,867).

Application No. 10/589660 teaches a photocurable optical material comprising a photoinitiator, a o-phenylphenyl (meth)acrylate compound (reads on instant formula (2)) and an bis-phenyl-sulfide compound, lacking an ethoxy group, similar to that of instant formula (1). Additionally, the application teaches the method for producing an optical material as cited in the instant application. Application No. 10/589660 does not teach instant structure (1), nor the more limited version of structure (1) in claims 5-10 and 16-21.

However, Fukushima et al teach an active ray-curable composition (Abstract) comprising a photoinitiator (5:4-5), 2-phenylphenyl(meth)acrylate (8:2) {instant structure (2) of instant application} and bis(4-acryloxyethoxyphenyl) sulfide [instant claims 5-10 and 16-21]. (Structure II 5:55-6:15, wherein Z=-S-, p & q=0, R<sup>3</sup>=(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>, n&m=1, and R<sup>2</sup>=H). Furthermore the

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reference teaches bis(4-acryloxyethoxyphenyl) sulfide being equivalent to the bis(4-(meth)acryloyloxyphenyl) sulfide structure (structure (1)) of Application No. 10/589660 (Structure II 5:55-6:15, wherein  $Z=S$ ,  $p$  &  $q=0$ ,  $n$  &  $m=0$ ; 5:55-6:15, and  $R^2=H$ ). Application No. 10/589660 and Fukushima et al are analogous art because they are concerned with the same field of endeavor, namely photocurable optical material. At the time of invention a person of ordinary skill in the art would have found it obvious to have used the bis(4-acryloxyethoxyphenyl) sulfide, as taught by Fukushima et al, in place of the bis(4-(meth)acryloyloxyphenyl) sulfide compound of Application No. 10/589660 and would have been motivated to do so since Fukushima et al suggest the two bis-phenyl-sulfide compounds are alternative equivalent compounds for a photocurable optical material.

This is a provisional obviousness-type double patenting rejection.

### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA TREIDL whose telephone number is (571)270-3993. The examiner can normally be reached on Monday- Thursday, 7:30AM- 5PM EST, Alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO, Ph.D./  
Supervisory Patent Examiner, Art Unit 1796  
20-Jul-08

/J.T./  
/7.9.08/